No. 4-2007 MONTHLY PACIFIC ENSO DISCUSSION FOR MICRONESIA AND AMERICAN SAMOA

April 2007

The Pacific ENSO Applications Center (PEAC) disseminated a special bulletin update to the first quarter 2007 newsletter (refer to

http://www.soest.hawaii.edu/MET/Enso/peu/update.html) and is preparing the second quarter bulletin, scheduled for release in late April. The Climate Prediction Center (CPC) stated the following in its April 5, 2007 ENSO Diagnostic Discussion (refer to http://www.cpc.ncep.noaa.gov): "A transition from ENSO-neutral to La Niña conditions is possible during the next 3 months." In addition, the CPC noted: "The pattern of anomalous sea surface temperatures (SSTs) during March was consistent with ENSO-neutral conditions in the tropical Pacific, with average to slightly below average SSTs extending from the date line to the west coast of South America. The cooling of the SSTs during the last few months has been accompanied by a rapid decrease in upper ocean heat content (with temperatures at thermocline depth around 3°-5°C below average), stronger than normal trade winds in the central Pacific, and a westward shift in equatorial cloudiness. The CPC concludes that: "Collectively, these atmospheric and oceanic conditions are consistent with a trend towards a Pacific cold (La Niña) episode."

Most of the latest climate forecast models predict continued anomalous equatorial surface cooling during the next several months. Climate models generally cannot predict beyond the May-June time frame with much skill. CPC states that: "there is considerable uncertainty as to when La Niña might develop and how strong it might be".

We have concluded that the El Niño-related drought in the western North Pacific is over, and it may have in fact ended last month. Conditions in the region now exhibit an ENSO-neutral pattern. Rainfall has returned to normal over most areas. An unseasonable typhoon developed in late March and impacted the Northern Mariana Islands in early April. However, more dry weather is expected for the Mariana Islands. Refer to the Hydrologic Outlook on the Weather Forecast Office Guam website at http://www.weather.gov/guam for discussions about the Mariana Islands. American Samoa could experience some additional tropical cyclone activity over the next month, but most activity will be shifted to the west. American Samoa should experience somewhat less than normal rainfall as it moves into its dry season.

The other area of anomalously dry weather will be the eastern and northern Marshall Islands. Some drought relief has come to the Marshall Islands over the past week. Kwajalein has received over 7 inches of rain this month, with over 3 inches falling in one day. Majuro received lesser amounts, but has measured over 3 inches so far this month. More persistent rains will arrive in the Marshall Islands as the Tropical Upper Tropospheric Trough (TUTT) becomes entrenched north of the islands in the next month or so. Water conservation is still recommended for most of the Marshall Islands.

PREPARED BY NOAA'S NATIONAL WEATHER SERVICE Coordinated with the Climate Prediction Center and the Pacific ENSO Applications Center.